The CATALOGIC 301C and 301F models correctly classify more than 80% and 90% of training chemicals, respectively.

Biodegradation models presented here meet the requirements (mechanistic interpretation, defined endpoint, scientific validity, applicability domain, documentation, etc.) necessary to replace testing for determining degradability of chemicals identifying the absence or presence of stable metabolites.

1. The CATALOGIC 301C and 301F models correctly classify more than 80% and 90% of training chemicals, respectively.
2. The SoilBioPath model which is focused on reproduction of experimentally observed metabolites in soil correctly reproduces 85% of documented metabolic maps.